

7

tion transmits a control signal via perch channels formed such that a long period code assigned to said base station and a first short period code is mapped in a first section of one slot of said perch channel and a second short period code and a third short period code are mapped in a second section of said one slot, comprising:

an RF unit for converting a received signal of a carrier frequency received from an antenna to a baseband signal; and

a matched filter for calculating a said correlation value for said baseband signal,

wherein said received signal includes a control signal, said long period code being assigned to said base station and said first short period code being assigned to each channel of said base station, and said second short period code having a spreading factor smaller than said first short period code and said third short period code having a spreading factor not greater than said first short period code, and wherein said matched filter calculates the correlation value for said control signal by use of said second short period code.

4. A mobile terminal according to claim 3, wherein said second short period code is a short period code common to base stations included in the mobile communication system, and said third short period code is one of a plurality of short period spreading codes each corresponding to classification of said long period code.

5. a mobile terminal used in a code division multiple access mobile communication system, comprising:

a RF unit for converting a received signal of a carrier frequency received from an antenna to a received signal of a baseband; and

8

a matched filter for calculating a correlation value for said received signal using a predetermined short period code,

wherein said received signal includes a control signal, a first section of one slot of said control signal having mapped in it a long period code assigned to said base station and a short period code assigned to each channel of said base station, a second section of said one slot having mapped in it said predetermined short period spreading code, and a number of taps of said matched filter is smaller than numbers representing spreading factor said short period code mapped in said first section.

6. A mobile terminal comprising a matched filter having a number of stages, said number of stages of the matched filter being smaller than a number representing a symbol length of a control signal transmitted in a section other than a long code masked symbol section in one slot on a perch channel, said matched filter having coefficients kept set for constant values.

7. A mobile terminal according to claim 6, wherein said number of stages of said matched filter is equal to a number representing a symbol length of a masked symbol in said long code masked symbol section.

8. A mobile terminal according to claim 7, wherein said coefficients of the matched filter correspond to a common short code (CSC) in said long code masked symbol section.

\* \* \* \* \*